

In groups of 4 or 5:

Q1

Software requirements analysis is unquestionably the most communications intensive step in the software engineering process. Discuss five reasons this communication path frequently breaks down.

Misunderstanding the reason for the communication

A client may not know why the "Requirements Elicitor" needs the information, or the extreme level of detail required

Client may feel threatened, thinking their job will disappear.

The Client may have bad breath, making the RE less inclined to want to talk to them.

Client is too busy/is not time released to deal with the RE

The client may not see why they have to talk to the RE

The RE may annoy the client by making them feel stupid.

Language issues (may not be familiar with the local language)
may think they know the language but get tripped up on certain terms

Ego problems/hubris

Excessive use of jargon

Prior history with the person leads you to think he may not do his work properly - results in a "why should i waste my time with him?".

Someone may want something that is impossible to deliver- won't listen to reason.

Forgetting someone's name (too embarrassed to have a conversation when you never name them directly).

Lack of confidence

New student - i've got to talk to the boss, and he's really important, and he'll think i'm a really unknowledgeable

Boss - i've got to talk to this new uni hot shot graduate who knows all about computers, and i don't know anything about them, and i'm going to look like a fool.

Personality issues

someone may talk all the time and not let you get a word in (and may interrupt you all the time).

Not paying attention - thinking about other things

Being impolite

- culturally sensitive

Talking to the wrong person

Domain knowledge,

Cultural assumptions

japanese may always say "yes"

Unspoken assumptions

The medium being used (e.g. email can be misinterpreted)

Intimidation by superiors

Political problems/ vested interests

Language difficulty

Q2

Please write down any new problems students identify, and forward them onto me for inclusion in this list.

Ask the students how many problems they think there are before you start.
Most will be surprised at how many there are.

Discover ambiguities and/or omissions in the following statement of requirements for part of a ticket issuing system:

A ticket issuing system is intended to automate the sale of rail tickets. Users select their destination, and input credit card and a personal identification number. The rail ticket is issued and their credit card account charged with its cost. The system works as follows: when the user presses the 'START' button, a menu display of potential destinations is activated along with a message to the user to select a destination. Once a destination has been selected, users are requested to input their credit card. Its validity is checked and the user is then requested to input a personal identifier. When the credit transaction has been validated, the ticket is issued.

You can think about the environment in which the machine is going to be placed

- physically - should it be weather proof? vandal proof?
- environmentally - if it issues receipts is there a bin for them? (ATMs)
 - will it look nice? will it be noisy?
- computer environment - what will it network with? what datacomms will it use?

If someone said "Build me a house" you would need to ask more questions.
"Build me a ticketing system" you also need more information.

does the screen have a starting page with instructions?

does it have a screen?

do it have a separate button for each destination?

weekly/daily ticket?

what errors occur if you have a bad input - how does it handle it?

does it cater for disabled people - braille?

Best to get them to think of scenarios of going to the train station to pay for tickets.

Ask them about prepaying for other journeys

Does it specify a date for the rail ticket?

- it doesn't specify the starting location of a journey
- are tickets validated separately from purchase?

What other cards can you use?

Debit cards? (Eftpos? (ask them if they know what eftpos stands for! :-))

Can you pay with cash?

What happens if the transaction is not validated?

Can your card be swallowed?

Will it reject it after a number of attempts?

Is the 'Start' button labelled "Start"?

Can you buy more than one ticket with one credit card transaction?

Cancel button?

Credit card number typed in, or is it inserted into the machine?

Cash transactions?

EFTPOS? (Electronic Funds Transfer Point Of Sale)

How to select destination - how will we structure the menu?

2 hour tickets? daily tickets? duration

Return ticket?

does it show the cost when you select a ticket?

concession tickets?

zone information

bank not specified for transactions

receipts

how to select destination - touch screen/other

machine maintenance - how does it occur? does the machine contact the maintenance people automatically.

what happens if it runs out of tickets?

does it give change? how much - can you use notes/coins

scope

how many people are going to use it?

new system, or built on top of an existing system.

how many would you want to build? dozens? hundreds?

who owns the intellectual property rights for the machine after construction?

Q3

Following are five questions that one may ask during an interview, identify each as either open-ended(O) or closed-ended(C)

How many people work in the taxation department?

Closed

Please describe your past experience with local area networks.

Open

How many workstations do we have?

Closed

What do you think of the new financial reporting system?

Open

What kind of information do you need to schedule equipment time?

Open/Closed?

Q5

Following are five questions that one may ask during an interview, identify each as either neutral(N), loaded(LO) or leading(LE)

You know that file is too large, don't you?

loaded/leading

Who fills out the fault reports during the day?

neutral

(if preceded by "These fault reports are hopeless!!!")

Where did you buy that useless keyboard?

loaded

You couldn't prepare that form via a terminal, could you?

leading

When was the last time your disk crashed?

leading/neutral

(depends on context)